

MEMORANDUM

To: Members of the State Board of Education

From: Amanda McCammon, Chief of Workforce and STEM Alliances

Date: May 2, 2018

Re: Course Title and Descriptions Additions 2018-2019

The Indiana Department of Education is seeking approval for additions of the Cambridge International Courses to the 2018-2019 Course Titles and Descriptions document as outlined in the Graduation Pathway Requirements.

Cambridge Courses To Be Added (with proposed Course Code):

Cambridge International AS and A Level Accounting (9706)

The Cambridge International AS and A Level Accounting syllabus enables learners to apply their accounting knowledge and understanding in order to analyze and present information, give reasoned explanations, and make judgements and recommendations. The syllabus covers topics such as the recording of financial information, accounting principles and control systems, and the preparation of final accounts for a variety of different organizations and businesses.

Learners find out about raising capital by shares and loans, ratio analysis and cost accounting, and also study the preparation of cash flow statements, cash flow analysis, and standard costing and investment appraisal, among many other topics.

Cambridge International AS and A Level Biology (9700)

Cambridge International AS and A Level Biology builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, a section on some current applications of biology, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of biology ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A Level Biology is ideal for learners who want to study biology or a wide variety of related subjects at university or to follow a career in science.

Cambridge International AS and A Level Business (9609)

The Business syllabus enables learners to understand and appreciate the nature and scope of business, and the role it plays in society. The syllabus covers economic, environmental, ethical, governmental,

legal, social and technological issues, and encourages a critical understanding of organizations, the markets they serve and the process of adding value. Learners examine the management of organizations and, in particular, the process of decision-making in a dynamic external environment.

Cambridge International AS and A Level Chemistry (9701)

Cambridge International AS and A Level Chemistry builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, a section on some current applications of chemistry, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of chemistry ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS and A Level Chemistry is ideal for learners who want to study chemistry or a wide variety of related subjects at university or to follow a career in science.

Cambridge International AS and A Level Computer Science (9608)

The aim of the Cambridge International AS and A Level Computer Science syllabus is to encourage learners to develop an understanding of the fundamental principles of computer science and how computer programs work in a range of contexts.

Learners will study topics including information representation, communication and Internet technologies, hardware, software development, and relational database modelling. As they progress, learners will develop their computational thinking and use problem solving to develop computer-based solutions using algorithms and programming languages. Studying Cambridge International AS and A Level Computer Science will help learners develop a range of skills such as thinking creatively, analytically, logically and critically. They will also be able to appreciate the ethical issues that arise with current and emerging computing technologies.

Cambridge International AS and A Level Design and Technology (9705)

This syllabus encourages learners to be innovative and creative and to develop their ability to design high quality products. Through their studies, they will develop an awareness of the significance of design and technology on society, while also learning more about production processes and industrial practices.

Learners will be encouraged the use ICT to build their design and technological abilities, and develop critical evaluation skills which they can employ in a variety of technical, aesthetic, economic, environmental, social and cultural contexts. As a result, learners will also become discerning consumers of design and technology, able to make informed choices.

Cambridge International AS and A Level Economics (9708)

Through the Cambridge International AS and A Level Economics syllabus, learners study how to explain and analyses economic issues and arguments, evaluate economic information, and organize, present and communicate ideas and judgements clearly.

The syllabus covers a range of basic economic ideas, including an introduction to the price system and government intervention, international trade and exchange rates, the measurement of employment and inflation, and the causes and consequences of inflation. Learners also study the price system, the theory of the firm, market failure, macroeconomic theory and policy, and economic growth and development.

Cambridge International AS and A Level English - Language (9093)

Cambridge International AS and A Level English Language gives learners the opportunity to study English language and its use in contemporary communication. It aims to encourage a critical response to texts in a range of forms, styles and contexts, and to promote skills of communication, reading, research and analysis.

Through their study, learners will develop an ability to read and analyze material, gaining further knowledge and understanding of English language features and issues, and writing clearly, accurately, creatively and effectively for different purposes and audiences.

Cambridge International AS and A Level English - Literature (9695)

Learners following the Cambridge International AS and A Level English syllabus will study a range of texts in the three main forms: prose, poetry and drama. Set texts are offered from a wide range of different periods and cultures.

Learners will develop skills of reading and analysis of texts, and are encouraged to undertake wider reading to aid understanding of the texts studied. They will learn skills of effective and appropriate communication including the ability to discuss the critical context of texts.

Cambridge International AS and A Level English General Paper (AS Level only) (8021)

The Cambridge International AS Level English General Paper encourages learners to engage with a variety of topics, including knowledge and understanding gained from study of other subjects. They learn to become confident in analyzing knowledge and opinion from a variety of sources, to build arguments and to communicate through written English.

The Cambridge International AS Level English General Paper enables learners to develop these skills which are of great use for further study and employment.

Cambridge International AS and A Level Environmental Management (AS only) - (8291)

This AS syllabus covers environmental issues and their management, especially the human aspect. Through their studies, learners gain an understanding of environmental resources and their human exploitation, and the goal of sustainable environmental management.

Learners also consider a range of case study material which can feature local, regional or global examples. Although Cambridge International AS Level Environmental Management extends and complements the relevant Cambridge IGCSE syllabuses, learners do not need to have studied the subject before starting the course.

Cambridge International AS and A Level Geography (9696)

The Geography syllabus builds upon skills gained at Cambridge IGCSE (or equivalent) level study. Learners widen their knowledge and understanding of the subject, while developing their investigative abilities and their evaluation and decision-making skills.

The syllabus is wide-ranging and comprises a variety of options. For example, learners can study topics such as hydrology and fluvial geomorphology, atmosphere and weather, rocks and weathering, population change and settlement dynamics. The syllabus considers a range of environments, from tropical to arid, and learners can also study subjects such as environmental management, global interdependence and economic transition.

Cambridge International AS and A Level Global Perspectives and Research - 9239

Cambridge International AS & A Level Global Perspectives and Research prepares learners for positive engagement with our rapidly changing world.

Learners broaden their outlook through the critical analysis of - and reflection on - issues of global significance. The Cambridge International AS & A Level Global Perspectives and Research syllabus is based on skills rather than on specific content. Learners develop research, thinking, reasoning and communication skills by following an approach to analyzing and evaluating arguments and perspectives called the Critical Path. Collaborative skills are enhanced through participation in a team project. The skills gained through study of Cambridge International AS & A Level Global Perspectives and Research enable students to meet the demands of twenty-first century learning and to make a successful transition to study in higher education.

As part of the course, learners write a research report on a research question of their own choice. Learn more about what's required in our [Learner's Guide to the Cambridge Research Report](#).

Cambridge International AS and A Level History (9389)

Cambridge International AS and A Level History is a flexible and wide-ranging syllabus covering modern history in the nineteenth and twentieth centuries. The syllabus builds upon skills gained at Cambridge IGCSE or Cambridge O Level and develops lifelong skills including understanding issues and themes within a historical period.

The emphasis is again on both historical knowledge and on the skills required for historical research. Learners develop an understanding of cause and effect, continuity and change, similarity and difference, and use historical evidence as part of their studies. At AS learners can select from topics on European, American or International history.

At A Level learners can select from topics on European, American, African, Southeast Asian and International history. Teachers choose which periods to focus on, allowing them to build a course that reflects their learners' interests and staff specialisms, or which is relevant to the local or regional context.

Cambridge International AS and A Level Information Technology (9626)

This syllabus encourages learners to become effective and discerning users of IT. It helps them to develop a broad range of IT skills, knowledge and understanding. Learners study the structure and use of IT systems within a wide range of organizations, including the use of a variety of computer networks. As a result, learners gain an understanding of IT system life cycles, and how these affect the workplace. They also learn about the wider impact of IT on society in general. At A Level, learners also study simple programming for the web relevant to their own use of IT.

Cambridge International AS and A Level Marine Science (9693)

Cambridge International AS and A Level Marine Science provides a coherent and stimulating introduction to the science of the marine environment. The AS part of the course concentrates on the scientific study of the sea and its ecosystems, while the A Level part concentrates on human activities that depend on the sea and have an impact on it. No prior study at Cambridge IGCSE or Cambridge O Level is assumed.

The emphasis throughout is on the understanding of concepts and the application of ideas to new contexts as well as on the acquisition of knowledge, and the course encourages creative thinking and problem-solving skills which are transferable to any future career path. It is expected that practical activities will underpin the teaching of the whole course, and learners may be asked about practical activities in examination questions, but there is no practical paper and no coursework.

Cambridge International AS and A Level Mathematics (9709)

Cambridge International A Level Mathematics develops a set of transferable skills. These include the skill of working with mathematical information, as well as the ability to think logically and independently, consider accuracy, model situations mathematically, analyze results and reflect on findings.

Learners can apply these skills across a wide range of subjects and these skills equip them well for progression to higher education or directly into employment.

At AS level, teachers can choose from three different routes to Cambridge International AS Level Mathematics: Pure Mathematics only, Pure Mathematics and Mechanics, or Pure Mathematics and Probability & Statistics.

At A Level, teachers can also choose from different routes to Cambridge International A Level Mathematics depending on the choice of applied mathematics (Mechanics and/or Probability and Statistics).

Please note: From 2020 Cambridge International A Level Mathematics has two different routes: Pure Mathematics and Probability & Statistics only; or Pure Mathematics, Mechanics and Probability & Statistics.

Cambridge International AS and A Level Media Studies (9607)

Cambridge International AS and A Level Media Studies offers learners the chance to develop an understanding and appreciation of the place of media in our everyday lives. The syllabus enables learners to take a hands-on approach to the subject.

Through the coursework components - the Foundation Portfolio for AS Level and the Advanced Portfolio for A Level - they create their own media products from planning through to execution. Learners also consider and analyze examples from existing media, examining production processes and technologies and the effects they achieve.

Cambridge International AS and A Level Music (9483)

Cambridge International AS and A Level Music encourages learners to develop their musical skills in a variety of music styles and traditions and build on their musical interests. Learners are encouraged to listen, compose and perform with understanding, analysis and confident communication. They learn to become independent and critical thinkers.

Cambridge International AS and A Level Physical Science (8780)

The Cambridge International AS Level Physical Science syllabus builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, current applications of physical science, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of physical science ideas in novel contexts as well as on the acquisition of knowledge.

Cambridge International AS and A Level Physics (9702)

Cambridge International AS and A Level Physics builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, a section on some current applications of physics, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination.

The emphasis throughout is on the understanding of concepts and the application of physics ideas in novel contexts as well as on the acquisition of knowledge.

Cambridge International AS and A Level Psychology (9990)

Cambridge International AS and A Level Psychology learners develop their appreciation of the subject by exploring the ways in which psychology is conducted. As part of their studies, learners also review important research; this provides an insight into the ways in which psychology has been applied, thereby leading to a better understanding of key approaches, research methods and issues and debates.

The syllabus reflects four core areas of psychology, namely biological, cognitive, learning and social; it also relates psychology to abnormality, consumer behavior, health and organizations.

Cambridge International AS and A Level Sociology (9699)

In a rapidly changing world, Cambridge International AS and A Level Sociology offers learners the opportunity not only to explore the processes that are shaping current trends, but also to develop an understanding of the complexity and diversity of human societies and their continuities with the past.

The study of sociology stimulates awareness of contemporary social, cultural and political issues, and focuses on the importance of examining these issues in a rigorous, reasoned and analytical way.

Cambridge International AS and A Level Thinking Skills (9694)

Thinking Skills develops a set of transferable skills, including critical thinking, reasoning and problem solving, that students can apply across a wide range of subjects and complex real world issues.

The syllabus enables students to develop their ability to analyze unfamiliar problems, devise problem solving strategies, and evaluate the diverse ways a problem may be solved. During a Thinking Skills course, students learn to put their personal views aside in favor of examining and evaluating the evidence. Students learn how to make informed and reasoned decisions and construct evidence-based arguments.

These independent thinking skills build confidence and equip students with a toolkit for tackling complex and unfamiliar subjects, essential for successful progression to higher education or into professional employment.

For 2019

Cambridge International AS and A Level Art and Design (9479)

The Cambridge International A Level Art and Design syllabus considers expression and communication. Learners gain an understanding of visual perception and aesthetic experience, and the ways in which art and design creates a language of its own.

Most of the work for this syllabus is practical or studio based, so that learners can develop their abilities of observation and analysis of the visual world, sensitivity, skill, personal expression and imagination. They also learn how to relate their skills to an enhanced knowledge of their own cultures, past and present, as well as an appreciation of practical design problems.

This syllabus replaces Cambridge AS & A Level Art & Design (9704) from 2019 onwards. The last series for Cambridge AS & A Level Art & Design (9704) will be November 2019.